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Remarks

Applicants appreciate the recognition of patentable subject matter in the present application.

Applicant hereby adds new claims 32-36. Accordingly, claims 1-3 and 5-36 are pending in the present application.

Claims 1-6, 8-11, 13-14, 16-18, 20, 22-23, 26-27 and 29-30 stand rejected under 35 USC 102(e) for anticipation by U.S. Patent No. 7,088,392 B2 to Kakarala et al.

Applicants respectfully request reconsideration of the rejections.

Referring to claim 1, the Office relies upon the teachings of Fig. 6B and Fig. 7 as teaching the denoising and sharpening, respectively. Claim 1 recites comparing image data of one pixel location to image data of another pixel location and selecting one of denoising and sharpening responsive to the comparison. Applicants have failed to uncover any teachings in Kakarala of the claimed comparison in combination with the claimed selection. Applicants have failed to uncover any teaching that Fig. 6B or Fig. 7 are selected let alone the claimed selection responsive to the comparison of the image data of the one and the another pixel locations. Applicants respectfully submit that positively recited limitations of claim 1 are not disclosed nor suggested by the prior art and claim 1 is allowable for at least this reason.

The claims which depend from claim 1 are in condition for allowance for the reasons discussed above with respect to the independent claim as well as for their own respective features which are neither shown nor suggested by the cited art.

Referring to claims 5 and 6, The Office relies upon comparings in steps 670 and 710 in support of the rejection. However, claim 5 recites in combination with claim 1 that the comparing comprises *comparing image data of one pixel location with image data of another pixel location*. The predefined threshold used in the comparison of step 670 fails to teach the claimed comparison of the image data. Furthermore, the analysis of step 710 to determine whether K is set to zero fails to disclose the claimed comparison of the image data. Positively recited limitations of claims 5 and 6 are not disclosed nor suggested by the prior art and claims 5 and 6 are allowable for at least this reason.

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Referring to claim 11, the teachings of col. 12 relied upon in support of the rejection of claim 11 as allegedly teaching the claimed threshold comprising a plurality of values have not been demonstrated to be related to the operations of steps 670 or 710 relied upon as allegedly teaching the claimed comparings of claim 8 from which claim 11 depends. Applicants respectfully submit that the combination of limitations recited in claim 11 is not disclosed nor suggested by the prior art and claim 11 is allowable for at least this reason.

Referring to independent claim 18, the method positively recites filtering the mosaic data of the respective sets using a robust estimation filter. The Office identifies Figs. 6B and 7 as allegedly teaching a robust estimation filter. The Office has provided no support, explanation or evidence that the Fig. 6B for curing green mismatch or the sharpening of Fig. 7 teaches or suggests the claimed robust estimation filter. Applicants have electronically searched Kakarala and failed to uncover any teaching of the claimed robust estimation filter.

Furthermore, claim 18 positively recites filtering the mosaic data using a robust estimation filter. The teachings of Fig. 7 clearly refer to processing fully populated color planes obtained after demosaicing per col. 16, lines 25+. The processing of demosaiced image data using Fig. 7 fails to teach or suggest the claimed filtering of the mosaic data.

Applicants respectfully submit that positively recited limitations of claim 18 are not disclosed nor suggested by the prior art and claim 18 is allowable for at least this reason.

The claims which depend from claim 18 are in condition for allowance for the reasons discussed above with respect to the independent claim as well as for their own respective features which are neither shown nor suggested by the cited art.

Referring to claim 22, the device comprises processing circuitry configured to sharpen at least some of the mosaic data of the sets, and to demosaic the mosaic data after the sharpening to provide composite image data. The Office relies upon the teachings of Fig. 7 as allegedly teaching the claimed limitations. However, as is clear from the teachings of col. 16, lines 25, the operations of Fig. 7 are performed upon fully populated color planes of red, green or blue that are obtained after demosaicing. The teachings of Fig. 7 fail to teach or suggest sharpening mosaic data or the demosaicing mosaic data after the sharpening as explicitly claimed.

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Applicants respectfully submit that positively recited limitations are not disclosed nor suggested by the prior art and claim 22 is allowable for at least this reason.

The claims which depend from claim 22 are in condition for allowance for the reasons discussed above with respect to the independent claim as well as for their own respective features which are neither shown nor suggested by the cited art.

Referring to claim 27, the Office identifies Figs. 6B and 7 as allegedly teaching a robust estimation filter. The Office has provided no support, explanation or evidence that the Fig. 6B for curing green mismatch or the sharpening of Fig. 7 teaches or suggests the claimed robust estimation filter. Applicants have electronically searched Kakarala and failed to uncover any teaching of the claimed robust estimation filter. Furthermore, Fig. 7 processes fully populated color planes after demosaicing which fails to teach the applying of the filter to *mosaic data*. Applicants respectfully submit that positively recited limitations are not disclosed nor suggested by the prior art and claim 27 is allowable for at least this reason.

The claims which depend from claim 27 are in condition for allowance for the reasons discussed above with respect to the independent claim as well as for their own respective features which are neither shown nor suggested by the cited art.

Referring to claim 29, the Office has provided no support, explanation or evidence that the different processes of Figs. 6B and 7 are in a *common processing step* as claimed. In particular, Figs. 6B and 7 use different formulae including equation 19 and equations 20, 21, respectively. The calculations using plural different equations demonstrate that the disparate processes of Figs. 6B and 7 are not performed in a common processing operation. Furthermore, Fig. 6B is performed prior to demosaicing as set forth in col. 14, lines 59+ while Fig. 7 is performed after demosaicing per col. 16, lines 25+. Fig. 6B applies to processing of green information only to cure mismatch of the G1 and G2 pixels while the disparate process of Fig. 7 is applied to respective ones of the fully-populated color planes red, green or blue after demosaicing. The different processes of Figs. 6B and 7 involve respective different calculations using different formulae, are performed at different moments in time (i.e., before and after demosaicing), and operate upon different data (i.e., G1 and G2 pixels versus red, green and blue demosaiced data). The disparate processes of Figs. 6B and 7 fail to teach or

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suggest the claimed application of the robust estimation filter in a common processing operation as claimed.

Applicants respectfully submit that numerous limitations of the claims are not disclosed nor suggested by the prior art and claim 29 is allowable for at least this reason.

Applicants respectfully submit an Information Disclosure Statement herewith.

Applicants hereby add new claims 32-36 which are supported at least by Figs. 2,3, 5 and 6 and the associated teachings of the specification.

New claim 34 includes the limitations of original claims 1, 4, and 7 and is believed to be allowable in view of the indication in the Office Action that claim 7 is allowable.

New claim 35 includes the limitations of original claims 1, 4, 8 and 12 and is believed to be allowable in view of the indication in the Office Action that claim 12 is allowable.

New claim 36 includes the limitations of original claims 1 and 15 and is believed to be allowable in view of the indication in the Office Action that claim 15 is allowable.

Applicant respectfully requests allowance of all pending claims.

The Examiner is requested to phone the undersigned if the Examiner believes such would facilitate prosecution of the present application. The undersigned is available for telephone consultation at any time during normal business hours (Pacific Time Zone).

Respectfully submitted,
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